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ARTICLE CASE | DECEMBER 31 2018

# Best Practices in Responsible Land Use for Improving Biodiversity at a Utility-Scale Solar Facility 🛒

Parikhit Sinha ✉; Beth Hoffman; John Sakers; LynneDee Althouse

Email: [parikhit.sinha@firstsolar.com](mailto:parikhit.sinha@firstsolar.com)

*Case Studies in the Environment* (2018) 2 (1): 1–12.

<https://doi.org/10.1525/cse.2018.001123>

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Development of a utility-scale solar photovoltaic project involves management of various potential environmental impacts, including impacts on wildlife and habitat. Although solar facility construction activities do involve short-term disturbance, responsibly developed solar power plants can provide shelter, protection, and stable use of land to support biodiversity. Land use practices and their relationship to biodiversity are examined at one of the world's largest solar facilities, the 550 MW Topaz Solar Farms project in San Luis Obispo County, CA, USA. Pre- and postconstruction biological monitoring data indicate similar to higher vegetation productivity on-site compared to reference sites. Postconstruction monitoring has documented the presence of dozens of wildlife species, including several with special conservation status. Best practices in responsible land use utilized in the Topaz project are specified in the categories of community, biology, water, design and construction, and end of life. These practices, as well as future solar project development innovations that reduce ground disturbance, can be applied to enhance biodiversity at other solar facilities.

**Subjects:** Article Case, Biodiversity, Ecology and Biodiversity Conservation, Graduate, Land Use, Lower Division Undergraduate, North America, Professional and Continuing Education, Upper Division Undergraduate

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